

Work Order ID 152530***152530***

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Thursday, October 27, 2016 11:25:54 AM

Item ID: D119-646-141 **Accept** ***N900040100*** **Setup** **Start** ***NS1***
Revision ID: URF 15-560 **Stop** ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 **Start Qty:** 1.00 ***1*** **Cust Item ID:**
Required Date: 11/3/2016 **Req'd Qty:** 1.00 ***1*** **Customer:**
Reference:

Approvals: **Process Plan:**  **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3887-043	D								
IIN-D119-646	C	OK CP 11/11/12 customer not Agvitz							
100		0.00							

100

DC

Doc.Control -USB or Paperwork

Memo

Photocopy bluefile & type labels per PPP D119-646-141

CHG003

N/A **DAS**
21
9-89 **NOV 02 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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152530

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Item ID: D119-646-141 **Accept** ***N900040100*** **Setup** **Start** ***NS1***
Revision ID: URF 15-560 **Stop** ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 **Start Qty:** 1.00 ***1*** **Cust Item ID:**
Required Date: 11/3/2016 **Req'd Qty:** 1.00 ***1*** **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1- Bend FWD end of tube using Bender 1 and bend prog D3887 FWD per dwg D3887								
	2- Cut FWD end of tube as per dwg D3887.								
	3- Cut AFT end of tube as per dwg D3887.								
	4- Buff out marks left from bending								
	5- Drill Aft cap pilot hole using DT8149 ***DO NOT OPEN TO FINISHED SIZE***								
	6 -Cleco DT8149 in position and install drill Jig DT _____ drill X-bolt spacer pilot holes using 3/16" drill first side only.								
	7- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes.								
	8- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes usin DT9477								
	9- Drill FWD cap holes using DT8215.								
	10- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole. (verify measurement) as per dwg.								
	11- Drill Tow ring hole using DT10047 locate from fwd saddle hole. Open to finished size.								

N/A see w/o 150877

DQA: _____ Date: _____



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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Item ID: D119-646-141 **Accept** ***N900040100*** **Setup** **Start** ***NS1***
Revision ID: URF 15-560 **Stop** ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 **Start Qty:** 1.00 ***1*** **Cust Item ID:**
Required Date: 11/3/2016 **Req'd Qty:** 1.00 ***1*** **Customer:**
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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	12-Drill wearplate holes & open FWD & AFT cap holes per dwg								
	13- C'sink FWD cap hole as per detail "C"								
	14- Deburr								
120	Chemical Conversion Coat per QSI005 4.1	0.00							
120									
HandFinish	Memo	0.00							
Hand Finishing									
121	QC3- Inspect Part Finish	0.00							
121									
QC	Memo	0.00							
Quality Control									

N/A
sl also
150877

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Item ID: D119-646-141**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:** URF 15-560**Stop*****NS2*****Item Name:** AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH**Start Date:** 10/27/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 11/3/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
122	QC5- Inspect part completeness to step on W/O	0.00							
122									
QC	Memo	0.00							
Quality Control									
130		0.00							
130									
Skidtubes	Memo	0.00							
Skidtubes	1-Open crossbolt spacer holes to finished size.								
	2-Deburr crossbolt spacer holes as per Dwg D3887 and blow out chips from inside the tube								

u
N/A
see w/o 150077

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order ID 152530

Thursday, October 27, 2016 11:25:54 AM

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Item ID: D119-646-141 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 15-560 Stop ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 11/3/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* Skidtubes	Memo 1-Bond web in place as per Dwg D3887 & QSI 015. A/RSikaflex-291 _____ Sikaflex expire date: _____ Start: _____ Time: _____ Finish: _____ Time: _____ ***** (Adhere for 12 hours) ***** 2- Countersink crossbolt spacer holes, and prepare tube for welding, deburr. 3- C'sink crossbolt spacer holes, and prepare tube for welding, deburr.	0.00 0.00							
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							

N/A see w/d 150877

DQA: _____ Date: _____



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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Skidtubes	Memo NOTE:TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD GROUND HANDLING FIXTURE,IF FIXTURE FITS WELL THEN PROCEED. FIXTURE DT10091. 1-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/RAluminum Rod _____ 2-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole. 3-Counterbore 5/16" x 0.750" deep as per Dwg D3887. 4- Deburr & Scribe batch # on Aft end of tube.	0.00 0.00							
170 *170* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo TEST FIT USING FIXTURE DT10091.	0.00 0.00							

N/A
see w/o
150877

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QA Closed: _____ Date: _____

Work Order update only ☐

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Work Order ID 152530

Thursday, October 27, 2016 11:25:54 AM

152530

Page 7

Item ID: D119-646-141 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 15-560 Stop ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 11/3/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo w Continue from here from w/o 150877	0.00 0.00							
190 *190* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo AND REALODINE AS PER PAR09-043	0.00 0.00							(X1) 2016/10/31 BEB
200 *200* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum m 134798. Memo START TIME: 8:55 OVEN TEMPERATURE: 320° FINISH TIME: 9:25.	0.00 0.00						1 16-1401 DAS 34 9-89	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐				

Work Order ID 152530

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152530

Page 8

Item ID: D119-646-141 **Accept**
Revision ID: URF 15-560
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 **Start Qty:** 1.00 ***1***
Required Date: 11/3/2016 **Req'd Qty:** 1.00 ***1***
Reference:

N900040100

Setup Start ***NS1***
Stop ***NS2***

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC3- Inspect Part Finish	0.00							
210									
QC	Memo	0.00							
Quality Control									
220		0.00							
220									
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts as per Dwg D3887.								
230	QC5- Inspect part completeness to step on W/O	0.00							
230									
QC	Memo	0.00							
Quality Control									

DAS
15
9-89

DAS
34
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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OTHER : ☐					

Work Order ID 152530

Thursday, October 27, 2016 11:25:54 AM

152530**Item ID:** D119-646-141**Accept*****N900040100*****Setup Start****Revision ID:** URF 15-560**Item Name:** AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH**Stop****Start Date:** 10/27/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 11/3/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run**Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty
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240

0.00

240

HandFinish

Memo

0.00

Hand Finishing

1-Install wearpads, gaskets and wearplates as per Dwg D3887. Put sikaflex in insert before installing bolts and washers

A/R Sikaflex-240/-291 M135772Sikaflex expire date: 17102

2-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: M135473

3 -Inspect for foreign objects as per QSI 024

4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-240/-291 M135772Sikaflex expire date: 17102

250

QC5- Inspect part completeness to step on W/O

0.00

250

QC

Memo

0.00

Quality Control

DAS
38
789

NOV 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions																																																																										
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance																																																																										
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect																																																																										
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																																																										
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Misidentified ☐	☐ Past Due																																																																														

Work Order ID 152530

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152530

Page 10

Item ID: D119-646-141 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 15-560 Stop ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 11/3/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
255 *255* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <u>M1135819</u> Memo	0.00 0.00				<u>16</u>	<u>9</u>	<u>16/11/16</u>	
256 *256* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				<u>1</u>			DAS 38 9-89 NOV 02 2016
260 *260* Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo <u>PPPISSON</u>	0.00 0.00				<u>Smb</u> <u>16/11/16</u>			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

Work Order ID 152530

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152530

Page 11

Item ID: D119-646-141 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 15-560 Stop ***NS2***
Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH
Start Date: 10/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 11/3/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	QC21- Final Inspection - Work Order Release	0.00							
270									
QC	Memo	0.00							
Quality Control									

DAS
21
9-09
NOV 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Page 1

Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
12.11.05 (DEOD3887-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20
per chg003 ECN13-534 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-190		Manufactured	No			110	Each	37.0000	1	1			
D2500-1-190									**				
Ext'n - I Beam Tube 4"													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				HALL				37					
				145247				37					
D2579		Manufactured	No				Each	113.0000		2			
D2579									**				
Crossbolt Spacer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				113					
				123997				1					
				141711				112					
D2855-3		Manufactured	No			240	Each	52.0000	2	2			
D2855-3									**				
Cap													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP001				52					
				142564				52					

D119-646-041 B150877
work continued from w/p 150877

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																													
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Description Work Order Deviation		Disposition																																																																													
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Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

D3492-5 Manufactured No 240 Each 63.0000 16 16

Start Qty: 1.00

Required Qty: 1.00

D3492-5

Plug

**

all 16/11/16

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	63	<i>B</i>
133396	8	
136396	6	
138198	2	
<u>145446</u>	47	<i>X16</i>

NAS1611-005 Purchased No 240 Each 248.0000 16 16

NAS1611-005

O-RING

**

all 16/11/16

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	248	
m129198	11	
m133498	19	
m134816	8	
m135465	16	
<u>m135706</u>	194	<i>X16</i>

D3672-1 Manufactured No 240 Each 1,102.000 2 2

D3672-1

Washer, Phenolic

**

all 16/11/16

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	
85222	10	
FP001	880	
112218	4	
<u>134785</u>	376	<i>X2</i>
150074	500	
ST049	212	
147077	212	

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Description Work Order Deviation			Disposition																		
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Root Cause			FAULT CATEGORY																		
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER :																					

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Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

D3681-1 Manufactured No 160 Each 125.0000 8 8 Start Qty: 1.00 Required Qty: 1.00

D3681-1

Spacer

Location	Loc Qty	Loc Code
LG001	125	
145956	1	
151967	124	

D3847-1 Manufactured No 240 Each 36.0000 5 5

D3847-1

Wearpad

Location	Loc Qty	Loc Code
FP001	36	
148686	16	
150954	20	

D3847-11 Manufactured No 240 Each 13.0000 1 1

D3847-11

Wearpad

Location	Loc Qty	Loc Code
FP001	13	
142783	9	
151008	4	

D3847-043 Manufactured No 240 Each 14.0000 1 1

D3847-043

Wearplate Fwd

Location	Loc Qty	Loc Code
FP002	14	
136770	1	
139751	13	

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

D3847-045 Manufactured No 240 Each 18.0000 1 1 Start Qty: 1.00 Required Qty: 1.00
D3847-045 ** del 161110
Wearplate Center

Location	Loc Qty	Loc Code
FP002	18	
136771	4	<u>X</u>
139752	14	

D3847-047 Manufactured No 240 Each 7.0000 1 1 Start Qty: 1.00 Required Qty: 1.00
D3847-047 ** del 161110
Aft Wearplate Assembly, Std Gear

Location	Loc Qty	Loc Code
FP002	7	
136772	7	<u>X</u>

D3885-1 Manufactured No 140 Each 14.0000 1 1 Start Qty: 1.00 Required Qty: 1.00
D3885-1 **
Standard Web

Location	Loc Qty	Loc Code
LG002	14	
146232	4	
150075	10	

D3903-1 Manufactured No 160 Each 77.0000 12 12 Start Qty: 1.00 Required Qty: 1.00
D3903-1 **
Spacer

Location	Loc Qty	Loc Code
LG001	77	
150281	77	

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

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Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

ALS4-1032-130 AELS4-1032-130 Purchased

No

220

Each

Start Qty: 1.00
4,666.000 30 30

Required Qty: 1.00

ALS4-1032-130

Rivnut

ll 16/11/01

Location

Loc Qty

Loc Code

CCK004

2364

M135442

2364

FG

50

FG

M135442

50

FP001

2020

M133077

122

M135442

1898

ST556

232

x 30

M135442

232

AN3C5A

Purchased

No

240

Each

1,404.000 32 32

AN3C5A

Bolt

ll 16/11/01

Location

Loc Qty

Loc Code

FG

5

122800

5

FP001

245

M135297

245

x 32

OVER002

1000

M135442

200

M135603

400

M135948

400

ST350

154

M134676

154

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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OTHER :																					

Picklist Print

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Work Order ID: 152530

152530

Parent Item: D119-646-141

D119-646-141

Parent Item Name: AW119 Replacement Skidtube with Standard Wearplates & Wearpads, Fits LH & RH

Start Date: 10/27/2016

Required Date: 11/3/2016

NAS1149C0332R

Purchased

No

Each

Start Qty: 1.00
4,578.000

32

Required Qty: 1.00

NAS1149C0332R
WASHER

del 16/11/01

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	118	
m135274	118	
GA	86	
m133284	86	
ST260a	3000	
m135466	1000	
<u>m135672</u>	1000	
m135948	1000	
ST266	1374	
m135408	674	
m135766	500	
m135908	200	

132

MS24694-C52

Purchased

No

Each

44.0000

2

MS24694-C52
SCREW

del 16/11/01

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	26	
<u>m135466</u>	26	
ST285	18	
124308	4	
m127059	4	
m133855	10	

X2

DQA: _____ Date: _____

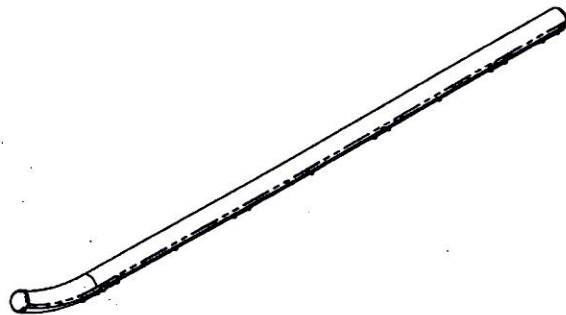


WORK ORDER NON-CONFORMANCE / UPDATE

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D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3887-043 STANDARD SKIDTUBE ASSY WITH WEAPLATE (SIMILAR)
D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
2		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
3			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE
10	2	2	2	D2579	CROSS BOLT SPACER
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	2	2	2	D3872-1	PHENOLIC WASHER
14	8	8	8	D3881-1	SPACER
17	5	5		D3847-1	WEARPAD
18	1	1		D3847-11	AFT WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-047	AFT WEARPLATE ASSY
22			1	D3849-041	FWD TRAINING WEARPLATE ASSY
23			1	D3849-043	AFT WEARPLATE ASSY
24	1	1	1	D3885-1	STANDARD WEB
25	1	1		D3887-11	STANDARD SKIDTUBE
26			1	D3887-13	STANDARD SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
41	30	30		ALS4-1032-130	INSERT
42	32	32	2	AN3C5A	BOLT
43			8	AN3C48A	BOLT
44	32	32		NAS1149C0332R	WASHER (OR AN960C10L)
45			8	MS21043-3	NUT
46	2	2	2	MS24894-C52	SCREW

RELEASED

UNDER REVIEW

15.04.30 URF15-560 AP

2014 NOV 24

ECN 14-018

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-1 WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3887-041 = 32.0 lbs
D3887-043 = 37.0 lbs
D3887-045 = 38.1 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8931 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL ALS-1032-130 INTO D3887-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/291.

W/O 152530

D	REVISED BEND TOLERANCES FOR MANUFACTURABILITY. 135.07 WAS 134.04 (ZN D5-8). ADD 9.07 (ZN C2-8). ADD 119.8 (ZN D5-8). DELETE GASKETS (BOM, SH2)	DB	13.09.20
C	(SH11, PL, ZN C2-2, C2-2 C4-2) ITEM 13, QTY 2 WAS 4. ITEM 42, QTY 32 WAS 34. ITEM 44, QTY 30 WAS 32. ADD ITEM 46, MS24894-C52 WAS AN3C5A, 2 PLCS (ZN C1-5, C1-6, B4-7) Ø0.201 CSK Ø0.385 X 100" WAS Ø0.214 THRU. ADD DETAIL F (ZN C5-5, C5-6, B5-7). ADD ITEM 10, D2579 CROSS BOLT SPACER (ZN D4-1, A8-7)	DB	13.02.19
B	ALS4-1032-130 WAS ALS-1032-130 (ZN C4-1, C5-7, C3-7). ADD DT8931 (ZN A8-1). ADD 134.04 (ZN C4-8). D2855-3 WAS D2579 (ZN D4-1, C1-2, C2-2, C1-3, C2-3, C1-4, C2-4). AN3C5A WAS AN3C4A (ZN C5-2, C2-2, C5-3, C5-4, C2-4). Ø0.313 WAS Ø0.328 (ZN C4-5, C4-5, C2-7 & B3-7) REVISED NOTE N (ZN B3-7)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	DB		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.09.20		
DART AEROSPACE USA, INC. KENT, WA			
DRAWING NO. D3887			
TITLE A119 STD SKIDTUBE ASSY			
REV. D SHEET 1 OF 8 SCALE NTS			

AN3C5A BOLT
D3872-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

D3847-11
WEARPAD

1.5
1.5
1.5

2.00 DISTANCE TO D3885-1 WEB, REF

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

11
Ø0.197
8 PL PER SIDE
REF

AN3C5A BOLT
NAS1149C0332R WASHER
24 PL

PLUG UNUSED INSERTS WITH
AN3C5A BOLT
NAS1149C0332R WASHER
8 PL

D3847-1
WEARPAD
5 PL

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24804-C52 SCREW
(1 PER SIDE)

D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD
(MAKE FROM D3887-11)

UNDER REVIEW

15.04.30 URF15-560 AP

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MFG. APPR.		D3887	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		A119 STD SKIDTUBE ASSY	NTS
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AN3C5A BOLT
D3672-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

D3847-11
WEARPAD

D3847-047
AFT WEARPLATE ASSY

AN3C5A BOLT
NAS1149C0332R WASHER
30 PL

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

11
Ø0.197
8 PL PER SIDE
REF

D3847-045
CENTER WEARPLATE ASSY

D3847-043
FWD WEARPLATE ASSY

D3847-1
WEARPAD
5 PL

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24684-C52 SCREW
(1 PER SIDE)

D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3887-11)

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AN3C5A BOLT
D3672-1 PHENOLIC WASHER
NAS1149C0332R WASHER
(1 PER SIDE)

SEAL WITH
SIKAFLEX-241/291

D2855-3 CAP

AN3C46A BOLT
D3904-1 WASHER, 2 PL
MS21043-3 NUT
8 PL

D3848-043
AFT TRAINING WEARPLATE ASSY

BLACK ANTI-SKID TO 0.5
ABOVE LOCATION RIDGE
TYP

2.00 DISTANCE TO D3885-1 WEB

1.5 1.5 1.5 1.5

D3849-041
FWD TRAINING WEARPLATE ASSY

D2855-3 CAP

SEAL WITH
SIKAFLEX-241/291

MS24894-C52 SCREW
(1 PER SIDE)

UNDER REVIEW

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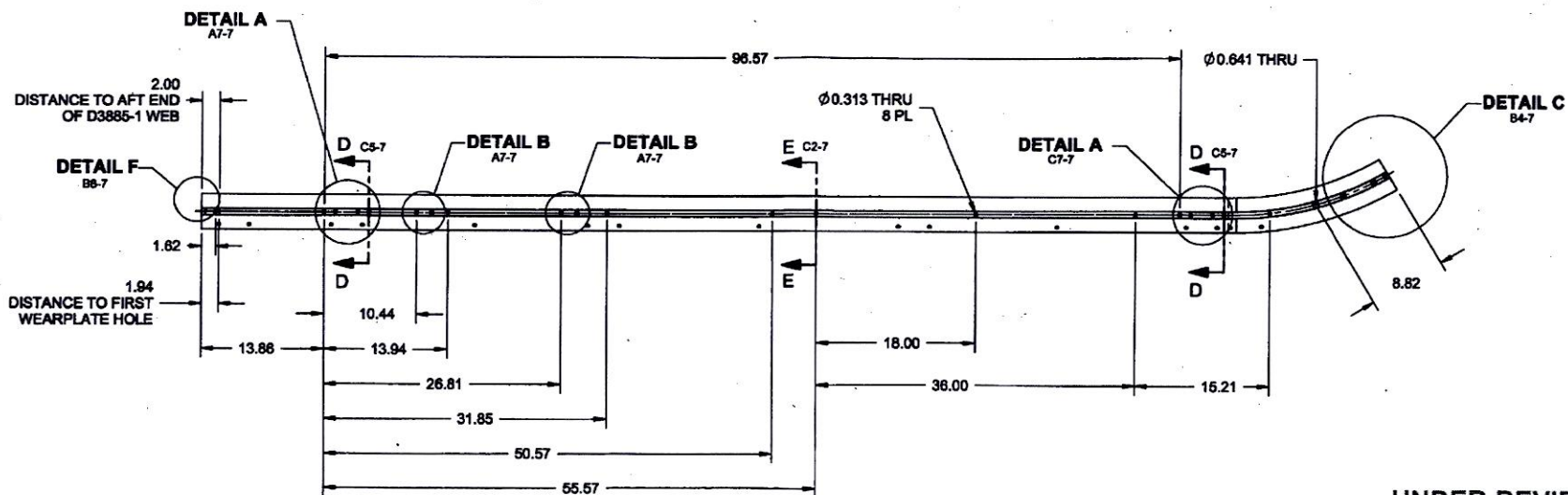
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D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE

(MAKE FROM D3387-13)

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D3887-11 DRILLING DETAIL
(MAKE FROM D3887-1)

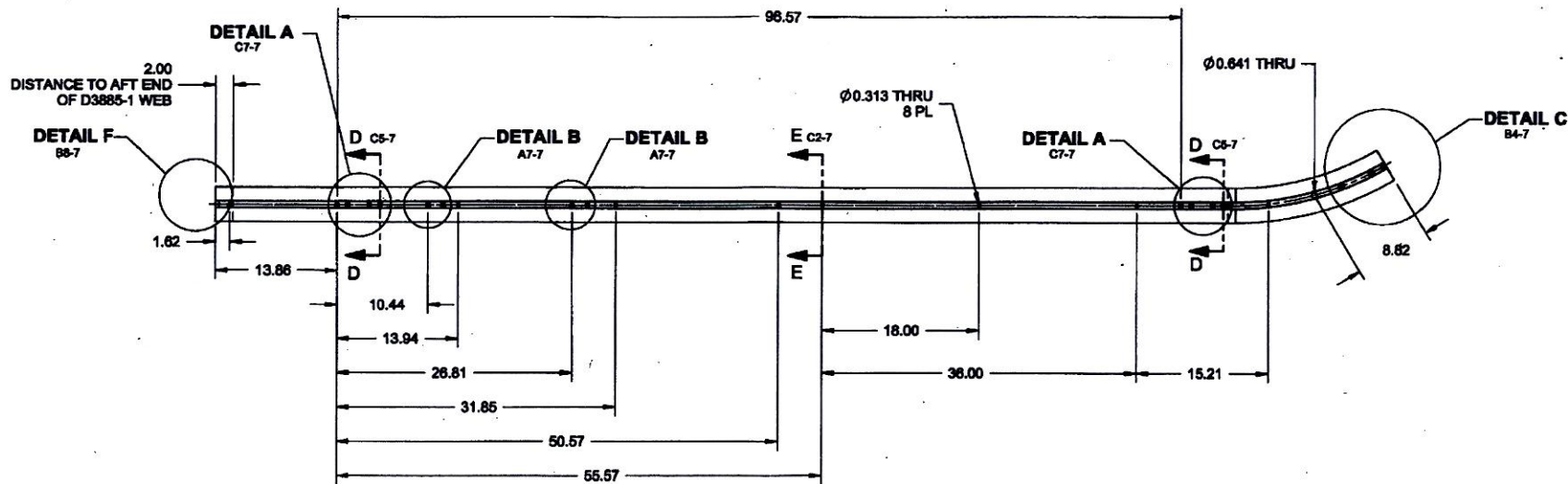
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D3887-13 DRILLING DETAIL
(MAKE FROM D3887-1)

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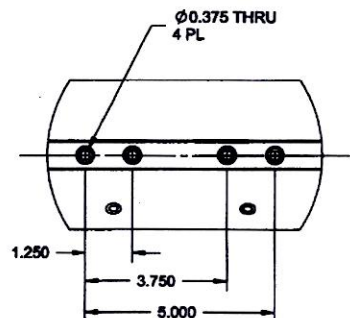
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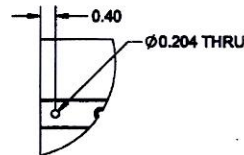
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8 7 6 5 4 3 2 1



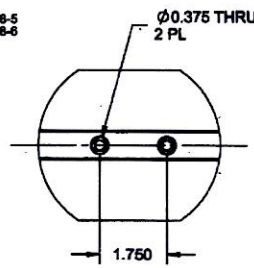
DETAIL A
SCALE 4X

D7-5
C3-5
D7-6
C3-6



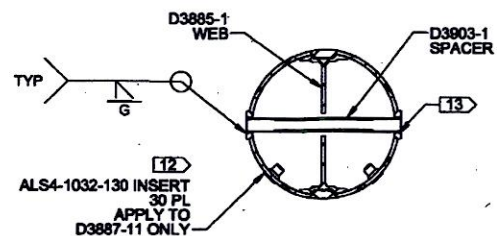
DETAIL F
SCALE 4X

C8-5
C8-6



DETAIL B
SCALE 4X

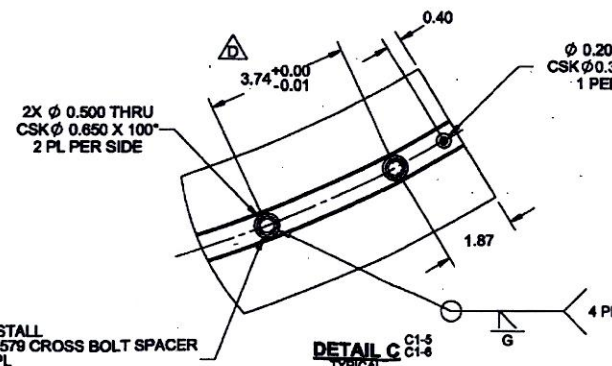
C8-5
C8-6
C8-6
C8-6



SECTION D-D
SCALE 4X

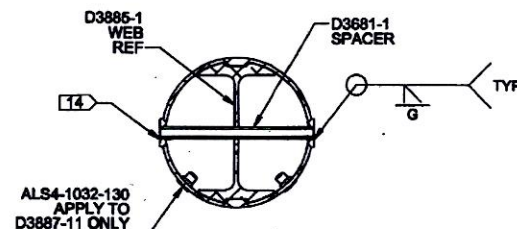
(FOR 12 X Ø 0.375 HOLES
PER SKIDTUBE)

C7-5
C3-5
C7-6
C2-6



DETAIL C
TYPICAL
SCALE 4X

C1-5
C1-6



SECTION E-E
SCALE 4X
(FOR 8 X Ø 0.313 HOLES
PER SKIDTUBE)

C4-5
C4-6

NOTES:

- 13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø 0.375 HOLES ONLY:
i) CHAMFER HOLES Ø 0.475 x 45°
ii) INSERT D3903-1 SPACER
iii) WELD INTO PLACE AND GRIND FLUSH
iv) CBORE TO 0.313 x 0.75 DEEP
v) DEBURR HOLES
- 14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø 0.313 HOLES ONLY:
vi) CHAMFER HOLES Ø 0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
vii) INSERT D3681-1 SPACER
viii) WELD INTO PLACE AND GRIND FLUSH
ix) DEBURR HOLES

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